

WHAT IS CLAIMED IS:

- 1 1. An auxiliary blindzone viewing mirror for attachment to a
2 main viewing mirror having a generally planar surface, the auxiliary blindzone
3 viewing mirror comprising:
4 a discrete mirror body defining a segment of a convex mirror having
5 a reflective surface, the convex mirror having a radius of curvature and a
6 magnification less than that of the main viewing mirror, the discrete mirror body
7 being shaped and positioned for viewing primarily only a driver's blindzone
8 encompassing the region between the outer limit of the viewing angle of the main
9 viewing mirror and the rearward limit of the driver's peripheral vision when the
10 driver is looking at the main viewing mirror, the discrete mirror body having a
11 generally planar base for mating engagement with the generally planar surface of the
12 main viewing mirror, the base having an outer peripheral edge and a recessed ledge
13 formed inboard of the outer peripheral edge.
- 1 2. The blindzone viewing mirror of claim 1, wherein the discrete
2 mirror body is formed from injection molded plastic.
- 1 3. The blindzone viewing mirror of claim 1, wherein a bead of
2 adhesive can be applied to the recessed ledge for adhesively attaching the blindzone
3 viewing mirror to the main viewing mirror while permitting the base of the
4 blindzone viewing mirror to mate flush with the planar surface of the main viewing
5 mirror.
- 1 4. The blindzone viewing mirror of claim 3, wherein the
2 adhesive has a generally low modulus of elasticity for absorbing differences in
3 thermal expansion and avoiding stress that would produce distortion of images.
- 1 5. The blindzone viewing mirror of claim 3, further comprising
2 an interior cavity inward of the recessed ledge for retaining excess adhesive which
3 may flow from the recessed ledge.

1 6. The blindzone viewing mirror of claim 1, further comprising
2 a double-sided adhesive pad, the adhesive pad being retained in the recessed ledge
3 of the blindzone viewing mirror, the thickness of the pad being sized to produce the
4 minimum protrusion of the pad below the base sufficient to provide adequate
5 adhesion of the blindzone viewing mirror to the main viewing mirror.

1 7. An automotive outside rearview mirror assembly comprising:
2 a main viewing mirror having a generally planar reflective surface;
3 a blindzone viewing mirror having a discrete mirror body adhesively
4 attached to the main viewing mirror, the discrete mirror body defining a segment
5 of a convex mirror having a reflective surface, the convex mirror having a radius
6 of curvature and a magnification less than that of the main viewing mirror, the
7 discrete mirror body being shaped and positioned for viewing primarily only a
8 driver's blindzone encompassing the region between the outer limit of the viewing
9 angle of the main viewing mirror and the rearward limit of the driver's peripheral
10 vision when the driver is looking at the main viewing mirror, the discrete mirror
11 body having a generally planar base for mating engagement with the generally
12 planar surface of the main viewing mirror, the base having an outer peripheral edge
13 and a recessed ledge formed inboard of the outer peripheral edge; and
14 an adhesive member disposed along the recessed ledge between the
15 blindzone viewing mirror and the main viewing mirror for retaining the blindzone
16 viewing mirror to the main viewing mirror.

1 8. The automotive outside rearview mirror assembly of claim 7,
2 wherein the blindzone viewing mirror is located in the upper and outer quadrant of
3 the main viewing mirror.

1 9. The automotive outside rearview mirror assembly of claim 7,
2 wherein the blindzone viewing mirror is comprised of injection molded plastic.

1 10. The automotive outside rearview mirror assembly of claim 7,
2 wherein the adhesive member comprises a bead of adhesive having a generally low
3 modulus of elasticity.

1 11. The automotive outside rearview mirror assembly of claim 7,
2 wherein the adhesive member comprises a double-sided adhesive pad, the adhesive
3 pad being retained within the recessed ledge of the blindzone viewing mirror.

1 12. The automotive outside rearview mirror assembly of claim 11,
2 wherein the thickness of the adhesive pad is sized to produce the minimum
3 protrusion of the adhesive pad below the base sufficient to provide adequate
4 adhesion of the blindzone viewing mirror to the main viewing mirror.

1 13. An automotive outside rearview mirror assembly comprising:
2 a main viewing mirror having a generally planar reflective surface
3 including a cut-out region in the upper and outer quadrant of the main viewing
4 mirror; and
5 an auxiliary blindzone viewing mirror inserted into the cut-out region
6 of the main viewing mirror for attachment to the main viewing mirror, the auxiliary
7 blindzone viewing mirror having a rim about at least a portion of the outer periphery
8 of the auxiliary blindzone viewing mirror for engaging the surface of the main
9 viewing mirror.

1 14. The automotive outside rearview mirror assembly of claim 13,
2 wherein the auxiliary blindzone viewing mirror comprises a convex reflective
3 surface, the convex surface having a radius of curvature and a magnification less
4 than that of the main viewing mirror, the auxiliary blindzone viewing mirror being
5 shaped and positioned for viewing primarily only a driver's blindzone encompassing
6 the region between the outer limit of the viewing angle of the main viewing mirror
7 and the rearward limit of the driver's peripheral vision when the driver is looking
8 at the main viewing mirror.

1 15. The automotive outside rearview mirror assembly of claim 14,
2 wherein the auxiliary blindzone viewing mirror is at least partially recessed such
3 that a portion of the convex surface lies below the surface of the main viewing
4 mirror.

1 16. The automotive outside rearview mirror assembly of claim 14,
2 wherein the auxiliary blindzone viewing mirror is fully recessed such that the
3 convex surface lies generally below the surface of the main viewing mirror.

1 17. The automotive outside rearview mirror assembly of claim 13,
2 wherein a portion of the rim defining the inboard edge of the auxiliary blindzone
3 viewing mirror is canted to obscure the reflection of the auxiliary blindzone viewing
4 mirror in the main viewing mirror.

1 18. An automotive outside rearview mirror assembly comprising:
2 a main viewing mirror having a generally planar reflective surface
3 including a cut-out region in the upper and outer quadrant of the main viewing
4 mirror;
5 an auxiliary blindzone viewing mirror located within the cut-out
6 region of the main viewing mirror;
7 a case for retaining the both the main viewing mirror and the
8 auxiliary blindzone mirror; and
9 a lip provided along the inboard edge of the auxiliary blindzone
10 viewing mirror, the lip overhanging the surface of the main viewing mirror to help
11 retain the main viewing mirror within the case, the lip having a canted surface for
12 obscuring the reflection of the auxiliary blindzone viewing mirror in the main
13 viewing mirror.

1 19. The automotive outside rearview mirror assembly of claim 18,
2 wherein the lip is formed as an integral part of the auxiliary blindzone viewing
3 mirror.

1 20. The automotive outside rearview mirror assembly of claim 18,
2 wherein the case further comprises a wall providing a border between the auxiliary
3 blindzone viewing mirror and the main viewing mirror, and the lip being formed
4 integrally with the wall.

1 21. The automotive outside rearview mirror assembly of claim 18,
2 wherein the auxiliary blindzone viewing mirror comprises a convex reflective
3 surface defining a segment of a convex mirror, the convex surface having a radius
4 of curvature and a magnification less than that of the main viewing mirror, the
5 auxiliary blindzone viewing mirror being shaped and positioned for viewing
6 primarily only a driver's blindzone encompassing the region between the outer limit
7 of the viewing angle of the main viewing mirror and the rearward limit of the
8 driver's peripheral vision when the driver is looking at the main viewing mirror.

1 22. The automotive outside rearview mirror assembly of claim 21,
2 wherein the convex surface of the auxiliary mirror is at least partially recessed
3 below the surface of the main viewing mirror.

1 23. The automotive outside rearview mirror assembly of claim 18,
2 wherein the auxiliary blindzone viewing mirror comprises a segment of a convex
3 mirror.

1 24. The automotive outside rearview mirror assembly of claim 18,
2 wherein the auxiliary blindzone viewing mirror comprises a spherically convex
3 plate.

1 25. The automotive outside rearview mirror assembly of claim 18,
2 wherein the case comprises a back surface contoured to receive both the main
3 viewing mirror and the auxiliary blindzone viewing mirror adhesively attached
4 thereto.